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**AGENCY OVERVIEW****627 Upper Great Plains Transportation Inst.****Date:** 01/13/2011**Time:** 10:57:27

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**Statutory Authority**

North Dakota Century Code Chapter 54-53.

**Agency Description**

The Upper Great Plains Transportation Institute was created by the North Dakota Legislative Assembly in 1967 as part of North Dakota State University to foster a better understanding of the role of transportation in the economy. The Institute allows North Dakota firms to more effectively compete by providing businesses, private sector organizations, and government agencies with the knowledge, information, and the intellectual capital necessary to make better business decisions and develop sound public policy. Additionally, the Institute explores ways to employ cutting edge communication and sensing technology to enhance the mobility of freight and people. The Institute's vision is to excel as one of the premier university transportation centers in the United States.

**Agency Mission Statement**

The Upper Great Plains Transportation Institute develops future transportation practitioners and leaders; enhances the quality of life and economic opportunity for individuals; improves the economic viability and global competitiveness of businesses; and reduces transportation's environmental impact by improving the mobility of freight and people through research, education, and outreach.

**Agency Performance Measures**

Performance measures reporting are not currently used by the UGPTI.

**Major Accomplishments**

1. Evaluated truck configuration involved in moving the annual North Dakota and Minnesota sugar beet harvest, resulting in a \$2.3 million savings to shippers and about \$5.8 million in pavement maintenance.
2. Provided the engineering analysis for concrete pavement reconstruction design changes that resulted in a construction savings of \$150,000 per mile.
3. Provided research for the development of an asphalt ride quality specification for new construction, resulting in smoother, longer-lasting facilities.
4. Managed a student design staff that developed construction plans for \$25.0 million to \$50.0 million of construction projects per year.
5. Provided undergraduate civil engineering and information technology students with experience that results in multiple job offers and opportunities after graduation.
6. Conducted high speed roughness surveys of the state's commercial and general aviation airports.
7. Collaborated with local road agencies to conduct traffic safety evaluations on county roads to identify and prioritize safety improvements.
8. Furnished 33 transportation training sessions to more than 1,427 workers in state, local, tribal and private agencies for more than 7,275 participant hours in 2009.
9. Provided training programs to help agencies meet federal requirements. Recent initiatives include work zone safety and traffic control in work zones and new reflectivity requirements for traffic control signs.
10. Offered 94 graduate-level transportation-related courses during 2008-09.
11. Entered an agreement with the departments of transportation in Montana, Wyoming, South Dakota and North Dakota to provide workforce development for those agencies.
12. Helped establish a nationwide cooperative effort to provide a Transportation Leadership Graduate Certificate Program.
13. Sponsored conferences on transportation policy and regulation, food and agricultural transportation, asset management, pavement and bridge management, and rural road safety.
14. Developed high-quality software in use by federal and state commercial safety specialists nationwide.
15. Continued to assist the Federal Motor Carrier Safety Administration (FMCSA) and state personnel in their partnership with the U.S. Customs and Border Protection to give inspectors the ability to identify and contain unsafe commercial motor vehicles and drivers before they reach our nation's roads.
16. Improved the quality of driver identification data collected for commercial vehicle roadside inspection and crash reports.
17. Conducted research which provided the basis for an emergency evacuation plan that was prepared, but never implemented, during 2009 flooding in Fargo. The research, using Fargo as a case study, provides a template for small- and medium-sized cities across the country that want to develop evacuation plans.

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18. Helped organize a new student organization at NDSU, the Association of Transportation and Logistics, that focuses on examining solutions to transportation challenges based on logistics technology.

**Future Critical Issues**

Mobility is fundamental to socioeconomic success. It is the glue that binds society together and permits a modern economy to develop and advance and requires major expenditures from both the private and public sectors. For these reasons, mobility must receive high priority from the state's public policy making bodies. There are two major categories of mobility: commercial transportation and personal mobility. The UGPTI is positioned to address the following transportation challenges facing North Dakota.

**Infrastructure Concerns**

These concerns are related to and aging system, lack of funding for replacement, inflation of construction costs, traditional and alternative energy development, reduced federal budgets, increased demands from freight transportation, reduced Class I rail service to rural areas, demographic shifts, age and cost of bridges, short-line rail development.

**Commercial Transportation Issues**

These concerns are due in some part to North Dakota's geographic location relative to sources of inputs and markets and are related to escalating fuel costs, transportation flows related to energy development, transportation system capacity, intermodal transportation, truck size and weight, competitive air passenger rates, competitive rates for bulk commodity shipping, and development of transportation corridors.

**Personal Mobility**

Personal mobility is critical for employment, obtaining services, socializing and entertainment. However, several significant factors may limit mobility. Rising fuel prices force families, individuals and transit agencies to devote a larger portion of their resources to meeting mobility needs. The elderly population in rural areas is growing rapidly and individuals often choose to age in place. They face increased mobility needs for medical and other services, but often have a limited ability to drive and limited access to other transportation choices. Growth in the state's urban areas will require greater emphasis on integrated land use and traffic planning to assure mobility for residents. Maintaining infrastructure in rural areas will be necessary to connect the rural and small urban population with the larger urban distribution, retail and cultural centers.

The safety of the transportation system is a critical concern in rural areas for both personal and freight mobility. Nearly 42 percent more fatal crashes occur in rural areas than in urban areas, and the fatality rate for the rural crashes is about twice as high.

**Technology and Management Challenges**

These challenges include development of effective asset management systems, adoption of intelligent transportation systems, integration of RFID technology into supply chain systems, providing an adequately trained transportation workforce, combining transportation and communication, and conducting research that promotes wise public policy decisions.

**REQUEST SUMMARY**

627 Upper Great Plains Transportation Inst.  
 Biennium: 2011-2013

Bill#: HB1020

Date: 01/13/2011

Time: 10:57:27

Description	Expenditures 2007-2009 Biennium	Present Budget 2009-2011	Budget Request Change	Requested Budget 2011-2013 Biennium	Optional Budget Request
<b>By Major Program</b>					
Core Program	14,595,793	26,326,992	(2,329,352)	23,997,640	0
<b>Total Major Program</b>	<b>14,595,793</b>	<b>26,326,992</b>	<b>(2,329,352)</b>	<b>23,997,640</b>	<b>0</b>
<b>By Line Item</b>					
Transportation Institute	14,595,793	26,326,992	(2,329,352)	23,997,640	0
<b>Total Line Items</b>	<b>14,595,793</b>	<b>26,326,992</b>	<b>(2,329,352)</b>	<b>23,997,640</b>	<b>0</b>
<b>By Funding Source</b>					
General Fund	1,216,966	1,589,793	289,218	1,879,011	0
Federal Funds	12,637,493	20,091,797	(2,526,414)	17,565,383	0
Special Funds	741,334	4,645,402	(92,156)	4,553,246	0
<b>Total Funding Source</b>	<b>14,595,793</b>	<b>26,326,992</b>	<b>(2,329,352)</b>	<b>23,997,640</b>	<b>0</b>
<b>Total FTE</b>	<b>51.95</b>	<b>52.30</b>	<b>1.00</b>	<b>51.65</b>	<b>0.00</b>

**REQUEST DETAIL**

627 Upper Great Plains Transportation Inst.  
Biennium: 2011-2013

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Date: 01/13/2011  
Time: 10:57:27

Description	Expenditures 2007-2009 Biennium	Present Budget 2009-2011	Budget Request Change	Requested Budget 2011-2013 Biennium	Optional Budget Request
<b>Transportation Institute</b>					
Salaries - Permanent	6,926,686	7,770,044	418,917	8,188,961	0
Salaries - Other	600,758	0	0	0	0
Temporary Salaries	762,830	1,097,290	222,710	1,320,000	0
Fringe Benefits	1,852,317	3,020,282	110,888	3,131,170	0
Travel	919,470	1,190,560	2,912	1,193,472	0
Supplies - IT Software	117,455	180,000	2,000	182,000	0
Supply/Material-Professional	61,998	90,205	0	90,205	0
Food and Clothing	108,455	100,000	0	100,000	0
Miscellaneous Supplies	47,422	60,000	0	60,000	0
Office Supplies	74,249	500,000	1,000	501,000	0
Postage	21,828	150,000	1,221	151,221	0
Printing	110,388	185,000	1,000	186,000	0
IT Equip Under \$5,000	189,630	530,550	0	530,550	0
Other Equip Under \$5,000	21,107	443,000	0	443,000	0
Insurance	7,668	10,000	0	10,000	0
Rentals/Leases-Equip & Other	5,022	144,000	0	144,000	0
Rentals/Leases - Bldg/Land	218,992	395,000	0	395,000	0
Repairs	70,694	70,000	0	70,000	0
Benefit Increase	0	127,329	0	127,329	0
IT - Data Processing	0	211,216	0	211,216	0
IT - Communications	276,214	340,000	0	340,000	0
Professional Development	15,195	255,516	0	255,516	0
Operating Fees and Services	272,147	1,500,000	0	1,500,000	0
Fees - Professional Services	219,753	630,000	0	630,000	0
Waivers/Scholarships/Fellowshi	12,000	12,000	0	12,000	0
Land and Buildings	461,759	3,000,000	(3,000,000)	0	0
Equipment Over \$5000	7,756	90,000	(90,000)	0	0
Grants, Benefits & Claims	1,214,000	4,225,000	0	4,225,000	0
<b>Total</b>	<b>14,595,793</b>	<b>26,326,992</b>	<b>(2,329,352)</b>	<b>23,997,640</b>	<b>0</b>

**Transportation Institute**

General Fund	1,216,966	1,589,793	289,218	1,879,011	0
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**Funding Sources**

General Fund	1,216,966	1,589,793	289,218	1,879,011	0
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**REQUEST DETAIL**

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**CHANGE PACKAGE SUMMARY****627 Upper Great Plains Transportation Inst.  
Biennium: 2011-2013****Bill#: HB1020****Date:** 01/13/2011**Time:** 10:57:27

Description	Priority	FTE	General Fund	Federal Funds	Special Funds	Total Funds
<b><u>Base Budget Changes</u></b>						
<b>One Time Budget Changes</b>						
A-E 3 Remove Capital Projects		0.00	0	(3,000,000)	0	(3,000,000)
<b>Total One Time Budget Changes</b>		<b>0.00</b>	<b>0</b>	<b>(3,000,000)</b>	<b>0</b>	<b>(3,000,000)</b>
<b>Ongoing Budget Changes</b>						
A-A 1 17 Pct Base Increase		0.00	8,133	0	0	8,133
A-A 4 Other Revenue Change		1.00	18,918	135,304	14,909	169,131
A-F 3 Remove Base Funding Equip over 5,000		0.00	0	(90,000)	0	(90,000)
Base Payroll Change		0.00	262,167	428,282	(107,065)	583,384
<b>Total Ongoing Budget Changes</b>		<b>1.00</b>	<b>289,218</b>	<b>473,586</b>	<b>(92,156)</b>	<b>670,648</b>
<b>Total Base Budget Changes</b>		<b>1.00</b>	<b>289,218</b>	<b>(2,526,414)</b>	<b>(92,156)</b>	<b>(2,329,352)</b>

**BUDGET CHANGES NARRATIVE****627 Upper Great Plains Transportation Inst.****Bill#: HB1020****Date:** 01/13/2011**Time:** 10:57:27

<b>Change Group:</b> A	<b>Change Type:</b> A	<b>Change No:</b> 1	<b>Priority:</b> 1
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## 17 Pct Base Increase

The UGPTI Advisory Council established a goal of obtaining state funding of UGPTI core administrative expenses. Achieving this goal is critical to the long-term viability of the Institute because administrative support is not usually available with grants and contracts.

The Executive Recommendation includes \$289,218 from the general fund to further progress towards this goal. The adjustment provides partial funding of three existing positions (communications manager, web manager and graphic artist) previously paid through grants and contracts, as well as \$8,133 for related operating expenses.

<b>Change Group:</b> A	<b>Change Type:</b> A	<b>Change No:</b> 4	<b>Priority:</b> 2
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## Other Revenue Change

The net Increase in other revenue, excluding capital projects, for 2011-13 totals \$381,430 (special and federal funds).

**Salary and Wages:** Special funds decrease of \$125,983 is the result of increase in general fund to cover payroll expenses for core program and vacant FTE. OMB's calculated GF cost to continue FY11 salary increases, totaling \$18,918, has been included in this total. The UGPTI currently has 7 vacant FTEs. This is a result of staff resignations.

- Position No. 18737 - Program Director of the Advanced Traffic Analysis Center (ATAC). Shawn Birst resigned his position and his responsibilities are currently assigned to Position No. 19905, Kurt Johnson, Program Director of the ND DOT Support Center (DOTSC).
- Position No. 21109 - Program Director of the Transportation Learning Network (TLN). Julie Rodriguez resigned her position and the position has recently been revised and will be advertised and filled by September 2010.
- Position No. 21395 - Advanced Research Fellow, ATAC. This position will be filled pending additional funding.
- Position No. 22856 - Associate Research Fellow, Small Urban and Rural Transit Center (SURTC). Gary Hegland resigned his position. This position is also under review and will be filled pending additional funding.
- Position No. 26735-1 - Administrative Assistant, Small Urban and Rural Transit Center (SURTC). Marsha Allahar resigned her position. This position is on hold pending additional funding.
- Position No. 26743-1 - Instructional Designer, Transportation Learning Network (TLN). Christine Crawford resigned her position. This position is on hold until a new TLN program director is hired. This position should be advertised and filled by December 2010.
- Position No. 62702-1 NEW - 1 FTE: UGPTI is pursuing the establishment of a technology test bed on campus. If successful, we would need to hire additional staff to set up and test a wide range of sensing technologies, collect data, store and interpret results and provide application software development capabilities. It is anticipated a number of private partnerships will be established to provide some of the funding and technology needs.

**Operating:** Increase in special and federal funds is expected with increase in grants and contracts.

<b>Change Group:</b> A	<b>Change Type:</b> E	<b>Change No:</b> 3	<b>Priority:</b> 1
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## Remove Capital Projects

**BUDGET CHANGES NARRATIVE****627 Upper Great Plains Transportation Inst.****Bill#: HB1020****Date:** 01/13/2011**Time:** 10:57:27

To remove \$3 million federal funding authorized for UGPTI Center for Transportation Study for the 2009-11 biennium. We will report on the status of the project to the appropriations committees of the sixty-first legislative assembly, as required.

<b>Change Group:</b> A	<b>Change Type:</b> F	<b>Change No:</b> 3	<b>Priority:</b> 1
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Remove Base Funding Equip over 5,000

To remove base funding for equipment > \$5,000.

<b>Change Group:</b> R	<b>Change Type:</b> A	<b>Change No:</b> 1	<b>Priority:</b>
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Retirement Rate Correction

This adjustment corrects the retirement rate for TIAA-CREF participants of the agency from the 16.4% used during budget submission to the actual rate of 10.4%.